

City of Brighton



2015

Water Quality Report

This report offers valuable water quality information for all our customers, including water service provided to Pine Creek Ridge, Dillion Area, and the Northstar Development located in Genoa & Hamburg Townships. The City of Brighton is pleased to report our water quality standards have complied with all Environmental Protection Agency (EPA) and State of Michigan standards and requirements for the 2015 calendar year. We are committed to and take pride in providing quality drinking water and service to our customers on a daily basis. If you have any questions or needs for service, please do not hesitate to contact your water utility for assistance. We will provide you with quick and responsive service for your needs, and as always, we are open to your suggestions for how we can improve our public service.

Water System Overview:

The City of Brighton's water supply comes to you from five groundwater wells located on two well fields, each providing treatment facilities for:

- Iron removal
- Adding chlorine for disinfection
- Adding fluoride, to reduce tooth decay
- Adding polyphosphate for corrosion control

After the treatment process, the water is pumped to one of three storage tanks, providing 1,620,000 gallons of water for normal system demand and reserve water for fire protection needs.

In September 2002 the City of Brighton identified our source water protection area and submitted a Wellhead Protection Program to the Michigan Department of Environmental Quality, which outlined management strategies to minimize the contamination threat to the municipal water supply. In April 2014 the City of Brighton completed a plan update, identifying new goals and guidelines within the plan to continue to protect one of our most precious resources, your Drinking Water.

A safe and reliable source of drinking water is essential for life. Because our water supply is limited, you can help protect this valuable resource by:

- Disposing all household and hazardous waste in a proper and safe manner. Information on the proper disposal of household and hazardous waste is available at www.brightoncity.org or you may contact the Department of Public Works Office at (810) 225-8001, and we will be more than happy to assist you.
- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water

- Don't dump anything down a storm drain, storm waters dump directly into your local water body.

Contaminants and Their Presence in Water:

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at (800) 426-4791.

Vulnerability of Subpopulations:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline at (800) 426-4791.

Sources of Drinking Water:

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity:

Contaminants That May Be Present in Source Water Include:

- Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can, also, come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

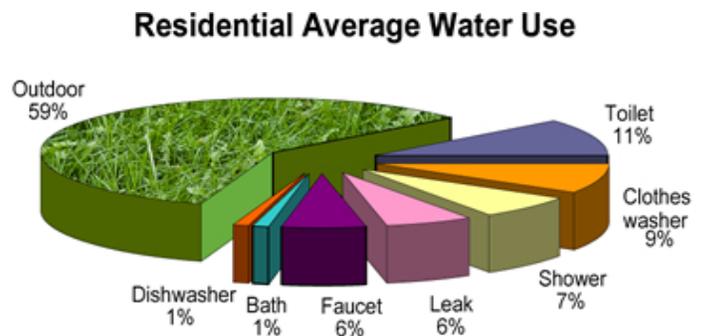
Additional Information for Lead:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Brighton is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can

minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1-800-426-4791 or

<http://water.epa.gov/drink/info/lead/index.cfm>.

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.



Source: American Water Works Association Research Foundation, End Uses of Water

- Take short showers – a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They are inexpensive, easy to install, and can save you up to

750 gallons a month

- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Cut your lawn 3" or higher each time you mow. Tall Grass retains more moisture longer, shades out weeds, and is more resistant to pest.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill! Visit www.epa.gov/watersense for more information.

Water Quality Data:

The City of Brighton routinely monitors for contaminants in your drinking water according to Federal and State standards. The table below shows the results of our monitoring for the period of January 1st to December 31st, 2015. The presence of these contaminants in the water does not necessarily indicate the water poses a health risk. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All of the data is representative of the water quality, but some are more than a year old

Terms and abbreviations used below:

Maximum Contaminant Level Goal (MCLG) – the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Residual Disinfection Level (MRDL) – means the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfection Level Goal (MRDLG) – means the level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

N/A: not applicable.

ND: not detectable at testing limit.

ppb: parts per billion or micrograms per liter.

ppm: parts per million or milligrams per liter.

pCi/l: picocuries per liter (a measure of radiation).

Action Level (AL): the concentration of a contaminant which, if exceeded triggers treatment or other requirements that a water system must follow.

Contaminants	MCLG	MCL	Your Water	Low	High	Date	Violation	Typical Source
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)								
Chlorine (as Cl ₂) (ppm)	4	4	0.21 RAA (Running Annual Avg.)	0.12	0.28	2015	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	ND	ND	ND	2015	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	20.9	20.9	20.9	2015	No	By-product of drinking water disinfection
Microbiological Contaminants								
Total Coliform (positive samples/month)	0	1	0	NA		2015	No	Naturally present in the environment
Radioactive Contaminants								
Radium (combined 226/228) (pCi/L)	0	5	1.06	ND	1.06	2010	No	Erosion of natural deposits
Inorganic Contaminants								
Arsenic (ppb)	0	10	ND	ND	ND	2012	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.38	0.28	0.38	2012	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	ND	ND	ND	2012	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	4	4	1.5	0.63	1.5	2015	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate as N (ppm)	10	10	ND	ND	ND	2015	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (optional) (ppm)		MPL	255	37	255	2015	No	Erosion of natural deposits; Leaching
Inorganic Contaminants	MCLG	AL	90th Percentile	Sample Date	# Samples Exceeding AL			Typical Source
Copper - action level at consumer taps (ppm)	1.3	1.3	1.2	2015	2	No		Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	1.0	2015	0	No		Corrosion of household plumbing systems; Erosion of natural deposits

Additional Tips:

- One useful number you need to know when programming your water softener is the hardness of the water. The hardness of the City of Brighton’s water is 25-27 grains, so set your softener to the proper settings and you’ll always have soft water and prevent over cycling of your system, saving on softening salt.
- You can extend the life of your hot water heater by flushing the sediments from your hot water tank twice a year (follow the recommended procedure in your owner’s manual).
- When replacing a hot water heater the cheapest is not always the best bargain compare warranties and annual operating cost before purchasing.

Contact and Customer Information:

Request for Emergency Service:

Monday – Friday 8:00 am – 5:00 pm (810) 225-8001

After hours, holidays, and weekends (810) 227-2968

We will update this report annually and will keep you informed of any problems that may occur throughout the year. Individual copies of this report will not be mailed this year; copies are available at City Hall – 200 N. First Street, the DPW Office – 420 S. Third Street, or on the City’s web site – <http://www.brightoncity.org>.

For more information about your drinking water, or the contents of this report, contact Tim Krugh, Utilities Director, at (810) 227-9479.

For more information about safe drinking water, visit the U.S. Environmental Protection Agency at <http://www.epa.gov/safewater/>.